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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,153	09/22/2003	Keisuke Sone	JCLA12271	2981

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EXAMINER

BINDA, GREGORY JOHN

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/669,153	SONE ET AL.	
	Examiner	Art Unit	
	Greg Binda	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) 2,4-10 and 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,11 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 1, 2005 has been entered.

Election/Restrictions

3. Claims 2, 4-10 & 12-17 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant elected the constant velocity joint shown in Figs. 1-8 (Group I, Species I) and timely traversed the restriction (election) requirement in the reply filed on October 29, 2004.

Response to Amendment

4. The amendment filed December 1, 2005 is objected to because the status identifier in each of claims 12-14 is incorrect. The status identifier that should be used for each is "withdrawn – currently amended". See Vol. 1296 Official Gazette - July 5, 2005.

Specification

5. The disclosure is objected to because the paragraph added at page 16 between lines 5 & 6 fails to comply with 37 CFR 1.74 which requires the detailed description to refer to the different parts of the invention by use of reference characters.

Claim Rejections - 35 USC § 102

6. Claims 1, 11 & 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Welschof et al, US 3,879,960.

a. Claims 1 & 19. Fig. 1 shows a fixed typed constant velocity joint comprising: a cylindrical joint outer ring 2 having an inner spherical surface 10 formed with a plurality of circumferentially equispaced axially extending track grooves 5; a joint inner ring 4 having an outer spherical surface 11 formed with circumferentially equispaced axially extending track grooves 6 paired with the track grooves 5 in the joint outer ring 2; a plurality of torque transmitting balls 7 disposed in ball tracks defined by cooperation between the track grooves 5, 6 in the joint outer and inner rings 1 & 2; and a cage 8 for holding the balls 7 disposed in the ball tracks. Fig. 1 shows the centers of curvature (see also col. 2, line 50) of the track grooves in the joint outer and inner rings are axially offset (see also col. 2, line 42) by the same distance 'e'. Fig. 1 shows track groove 5 of the joint outer ring 2 has an arcuate bottom 12 in a mouth innermost side and a straight bottom 13 on a mouth opening side. Fig. 1 shows the track groove 6 in the joint inner ring 4 has an arcuate bottom 14 on the mouth opening side and a straight bottom 15 on the mouth innermost side. Fig. 1 shows the joint outer ring 2 has a rear open end that has an inner

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diameter that is larger than an outer diameter of the joint inner ring 4. Fig. 1 shows an inner diameter surface 9' of the cage 8 is a surface having a shape such that the region located forwardly of an axial center is capable of controlling the forward movement of the joint inner ring (relative to the cage) while the region located rearwardly of the axial center is capable of allowing the axial movement of the joint inner ring (relative to the earth).

b. Claim 11. Fig. 1 shows a stem shaft 1 is fixed to the rear open end of the joint outer ring 2.

7. Claims 1, 3, 11 & 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartz et al, US 5,453,052.

a. Claims 1 & 19. Fig. 1 shows a fixed typed constant velocity joint comprising: a cylindrical joint outer ring 1, 7, 18 having an inner spherical surface (as at element 7) formed with a plurality of circumferentially equispaced axially extending track grooves 10; a joint inner ring 2 having an outer spherical surface formed with circumferentially equispaced axially extending track grooves 11 paired with the track grooves in the joint outer ring; a plurality of torque transmitting balls 6 disposed in ball tracks defined by cooperation between the track grooves in the joint outer and inner rings; and a cage 3 for holding the balls disposed in the ball tracks. Fig. 1 shows the centers of curvature of the track grooves in the joint outer and inner rings are axially offset by the same distance. Fig. 1 shows track groove 10 of the joint outer ring has an arcuate bottom in a mouth innermost side and a straight bottom on a mouth opening side. Fig. 1 shows the track

groove 11 in the joint inner ring has an arcuate bottom on the mouth opening side and a straight bottom on the mouth innermost side. Fig. 1 shows the joint outer ring has a rear open end that has an inner diameter that is larger than an outer diameter of the joint inner ring. Fig. 1 shows an inner diameter surface of the cage 3 is a surface having a shape such that the region located forwardly of an axial center is capable of controlling the forward movement of the joint inner ring while the region located rearwardly of the axial center is capable of allowing the axial movement of the joint inner ring.

b. Claim 3. Fig. 2 shows the outer spherical surface of the joint inner ring 24 is received by a receiving section 28 with a concave surface 26.

c. Claim 11. Fig. 1 shows a stem shaft 9 is fixed to the rear open end of the joint outer ring.

Response to Arguments

8. Applicant's arguments filed December 1, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the joint outer ring having a rear open end that is opposite the rings' mouth opening side) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
Art Unit 3679